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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 08/568,777
Filing Date: December 07, 1995
Appellant(s): SMITH ET AL.

MAILED

AUG 20 2007

Technology Center 2100

Ronald O. Neerings
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 6/13/07 appealing from the Office action mailed 5/25/06.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The following are the related appeals, interferences, and judicial proceedings known to the examiner which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal:

Appeal No. 1999-2042 provided as an appendix to the current appeal brief.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,249,218	Sainton	9-1993
5,020,090	Morris	5-1991

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4,225,919	Kyu et al	9-1980
5,581,597	Dent et al	12-1996
5,111,361	Kobayashi	5-1992

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 15, 17, 19, 22-23, 28, 30-44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sainton PN 5,249,218 in view of Morris PN 5,020,090.

In regards to claims 15, 30, 38: Sainton teaches a computer (104) comprising: a provision for user input (keyboard); a provision for output (display); a microprocessor (106) coupled to said user input and said output; and an interface (110 or alternatively 112); coupled to said microprocessor (106), said interface being directly connectable to a corresponding interface (118) in a portable telephone (116), wherein said interface comprises at least one voice channel lead (RX/SPK), one command channel lead (DIO/DATA), and a ground/reference lead (GND/GND) for connection to corresponding leads in a corresponding interface in said portable telephone (SPK, DATA, and GND respectively). Sainton teaches a cable connection Sainton

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does not teach a connecting the computer to the telephone without a cable or tethered connection. Morris teaches a computer directly connected to a telephone without a cable or a tethered connection (Figure 2). It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a connection without a cable because this would have prevented having to also carry a cable for interconnection. Sainton also expressly teaches that both the computer and the radiotelephone have a battery (Column 2 lines 45-64).

In regards to claim 17: Sainton teaches the command channel being a bidirectional half-duplex signal line (Column 13 lines 10-14).

In regards to claims 19 and 28: Sainton teaches the voice channel used for Data/Audio (Column 12 line 50 to Column 13 line 16 . Sainton also indicates the audio is digitized voice (Column 11 lines 14-33).

In regards to claim 22: Sainton teaches said interface further including a second voice channel lead (TX/TXAF) (Column 3 lines 64-65 Table 2 and Column 13 lines 10-16).

In regards to claim 23: Sainton teaches the voice channel leads facilitating a unidirectional full duplex mode (While Sainton does not use the words unidirectional full duplex Sainton teaches two separate wires one input and one output RX and TX. Which are for receiving and transmitting data respectively Column 5 lines 59-60 and Column 10 lines 50-60 thus unidirectional and transmits and receives data thus full-duplex Column 17 lines 32-35)

In regards to claim 31: Sainton teaches a keyboard (Column 4 line 55 to Column 5 line 9).

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In regards to claim 32: Sainton teaches a display (Column 4 lines 55 to Column 5 line 9). The examiner further notes the telephone is a cellular telephone which would also include a keyboard and display.

In regards to claim 33, 36, 39, 42: Sainton teaches one apparatus being a computer (104).

In regards to claim 34, 35, 37, 40, 41: Sainton teaches one apparatus being a radio telephone (116).

In regards to claim 43: Sainton teaches the computer system attached to a cellular telephone as described above. Sainton does not expressly teach said interface is located within a cavity in said computer. Morris teaches a laptop computer including an interface (94) located within a cavity (mounting Track Figure 2) for holding a cellular telephone. It would have been obvious to a person of ordinary skill in the art at the time of the invention to include a cavity for holding the cellular telephone because this would have allowed for separability between the computer and the cell phone (See Morris Column 1 lines 30-36). Further, Sainton and Morris are in the same field of endeavor in that both references seek to provide mobile communications capability in a portable computer environment. Sainton also expressly teaches that both the computer and the radiotelephone have a battery (Column 2 lines 45-64).

In regards to claim 44: Morris teaches the portable telephone fits at least partially within said cavity.

In regards to claim 46: Morris teaches a mechanism on said computer (30) that cooperates with a corresponding mechanism (46) for removably securing said portable telephone to said computer (see figure 6).

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3. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sainton PN 5,249,218 in view of Morris PN 5,020,090 as applied to claim 15 above, and further in view of Kyu et al PN 4,225,919.

In regards to claim 16: Sainton teaches the voice channel being unidirectional full-duplex (With TX/TXAF being the second channel See figure 3) instead of bidirectional half-duplex. Kyu et al teaches two basic types of data links are well known, including both bidirectional half-duplex and unidirectional full-duplex (See figures 2A and 2B and Column 7 lines 39-42). It would have been obvious to a person of ordinary skill in the art at the time of the invention to use bidirectional half-duplex because this would have decreased the number of required signal lines (As shown in Figure 2A with only 1 signal line and Figure 2B with 2 signal lines).

4. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sainton PN 5,249,218 in view of Morris PN 5,020,090 as applied to claim 15 above, and further in view of Dent et al PN 5,581,597.

In regards to claim 18: Sainton teaches the interface described above. Sainton does not teach the interface including a power line. Dent et al teaches (Column 8 lines 52-57) a cellular terminal (such as a cellular telephone) that is powered by an external signal line while the cellular terminal is "parked". It would have been obvious to include a power signal line because this would have allowed for recharging the cell phone (Figure 3 battery charger 153).

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5. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sainton PN 5,249,218 in view of Morris PN 5,020,090 as applied to claim 43 above and further in view of Kobayashi PN 5,111,361.

In regards to claim 45: Sainton in view of Morris teaches the computer with a cellular telephone housed within a cavity of the computer as described above. Morris does not expressly teach that the cellular telephone can fit completely within the cavity of the computer. Kobayashi teaches a notebook computer in which the battery pack (21) fits completely within a cavity for holding the battery pack (Flush with the surface). It would have been obvious to fit Morris's cellular telephone completely within the computer flush with the surface because this would have been aesthetically pleasing.

(10) Response to Argument

In regards to applicants argument that Sainton individually and Morris individually are the prior art – not the combination of Sainton and Morris as suggested by the examiner: While the prior art is Sainton individually and Morris individually, the rejection is not over Sainton individually and Morris individually. The rejection is over what the combination of Sainton and Morris make obvious to a person of ordinary skill in the art at the time of the invention. One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In regards to applicants argument that “Sainton clearly discloses in Figure 3 that the connector (112) of modem (10) in computer (104) (the interface for computer 104) is coupled via

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a 3 FT black round cable (114) to a corresponding connector (118) in cellular phone (116). As a result, there is NO DIRECT CONNECTION WITHOUT A CABLE OR TETHER between connector (112) of computer (110) and connector (118) of cellular phone (116), or the suggestion of any direct connection between connector (112) of computer (110) and connector (118) of cellular phone (116). Appellants' argument is confirmed by the Examiner's agreement that Sainton: 'does not teach connecting the computer to the telephone without a cable or tethered connection' (Office Action dated September 29, 2005, page 4, lines 24-26); Sainton clearly discloses in figure 3 that the connector (112) of modem (10) in computer (104) is coupled via a 3FT black round cable (Office Action dated May 25, 2006, page 2, lines 17-19). "The examiner again agrees. The rejection however is not over Sainton individually but over what the combination of Sainton and Morris make obvious to a person of ordinary skill in the art at the time of the invention. Direct connections with out a cable or tether are well known. Morris expressly shows a direct connection without a cable or tether in Figures 2 as stated in the rejection and applicants argument is not persuasive on this point.

In regards to applicants argument that Morris teaches the battery pack has been removed: This is correct. However again the rejection is not over Morris individually but over what the combination of Sainton and Morris make obvious to a person of ordinary skill in the art at the time of the invention. Sainton expressly teaches both the computer and the telephone each including their own batteries (Column 2 lines 45-64). The claim language simply claims "without a cable or tether" and is silent upon the structure of the locking mechanism used or even if there is a locking mechanism to hold the cell phone to the computer. Morris uses the

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battery pack's locking track (Figure 6) as the locking mechanism. See also figure 7 of Morris in which a different type of cell phone is used without any apparent removal of the battery pack.

The examiner also notes that Dent et al also teaches the well known feature of a direct connection of a cell phone to a cradle without a cable or a tether. See further MPEP 2144.04 V.

B. to make integral.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). And here it is clearly within the level of ordinary skill at the time of the invention to either directly connect Sainton's radiotelephone to the computer "without a cable or tether" or to add a battery to the telephone of Morris.

In regards to applicants argument that nothing in Sainton teaches interfaces and/or track mechanisms that would allow a combination device cell phone to directly couple electrically and mechanically to a portable computer: The examiner agrees. Had Sainton taught the track mechanism the examiner would have applied a 35 U.S.C. 102 rejection. However as here the rejection is under 35 U.S.C. 103 over the combination of Sainton and Morris. Morris expressly teaches a direct connection or the portable computer to the cell phone without a cable or tether See Figures 1-7.

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In regards to applicants argument that "the examiner has provided his own rationale for combining the Sainton and Morris and why the resulting combination could be further modified": There was no "further modification". Sainton teaches a cell phone coupled to a computer both of which have a battery. Morris teaches a cell phone directly coupled to a computer. Thus it would have been obvious to a person of ordinary skill in the art at the time of the invention to couple Sainton's telephone directly to the computer without a cable or tether. The examiner was also providing an alternative method of combining saying it also would have alternatively been obvious to add a battery to the cell phone of Morris. The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In regards to applicants argument that "the mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification. In re Gordon, 733 F.2d at 902, 221 USPQ at 1127.": "Not only the specific teachings of a reference but also reasonable inferences which the artisan would have logically drawn therefrom may be properly evaluated in formulating a rejection." In re Preda, 401 F.2d 825, 159 USPQ 342 (CCPA 1968) and In re Shepard 319 F.2d 194, 138 USPQ 148 (CCPA 1963).

"Furthermore, artisans must be presumed to know something about the art apart from what the references disclose." *In re Jacoby*, 309 F.2d 513, 135 USPQ 317 (CCPA 1962).

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"The conclusion of obviousness may be made from common knowledge and common sense of a person of ordinary skill in the art without any specific hint or suggestion in a particular reference." *In re Bozek*, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969).

"Every reference relies to some extent on knowledge of persons skilled in the art to complement that which is disclosed therein." *In re Bode*, 550 F.2d 656, 193 USPQ 12 (CCPA 1977).

The test of obviousness is:

"whether the teachings of the prior art, taken as a whole, would have made obvious the claimed invention," *In re Gorman*, 933 F.2d at 986, 18 USPQ 2d at 1888.

Subject matter is unpatentable under section 103 if it "'would have been obvious . . . to a person having ordinary skill in the art.' While there must be some teaching, reason, suggestion, or motivation to combine existing elements to produce the claimed device, it is not necessary that the cited references or prior art specifically suggest making the combination." *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ 2d 1500, 1502 (Fed. Cir. 1988).

"Such suggestion or motivation to combine prior art teachings can derive solely from the existence of a teaching, which one of ordinary skill in the art would be presumed to know, and the use of that teaching to solve the same [or] similar problem which it addresses." *In re Wood*, 599 F.2d 1032, 1037, 202 USPQ 171, 174 (CCPA 1979).

"In sum, it is off the mark for litigants to argue, as many do, that an invention cannot be held to have been obvious unless a suggestion to combine prior art teachings is found in a specific reference."

Entire quote from *In re Oetiker*, 24 USPQ 2d 1443 (CAFC 1992).

Accordingly, it is not required to disclose or specifically suggest particular elements. Instead the measure is what the teachings would suggest to one of ordinary skill in the art, not what the art specifically suggests.

In regards to applicants argument that the examiner has failed to provide proper motivation for the combination and resulting modification of Sainton and Morris (Page 15 of

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brief first paragraph): There is clearly not a "modify the resulting combination". Sainton expressly teaches a battery (Column 2 lines 45-64). Morris expressly teaches a direct connection between a cell phone and a computer (Figure 2). Thus it clearly would have been obvious to a person of ordinary skill in the art at the time of the invention to include a direct connection in Sainton without a cable or tether. The fact that it also would have been also been obvious to a person of ordinary skill in the art to include a battery in the cell phone of Morris as taught by Sainton is immaterial to the fact that it would have been obvious to a person of ordinary skill in the art at the time of the invention to include a direct connection in Sainton without a cable or tether. KSR, 127 S. Ct. at 1739, 82 USPQ2d at 1395 (citing *Graham v. John Deere Co.*, 383 U.S. 1, 12, 148 USPQ 459, 464 (1966) (emphasis added)), and reaffirmed principles based on its precedent that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results."

In regards to applicants argument that the examiner has failed to provide any evidence that the combination Morris with Sainton will result in an apparatus that would successfully implement all the elements of claims 15, 30, 38, 43 and 46: This is clearly incorrect see the rejection included above.

In regards to applicants argument that prior art reference (or references when combined) must teach or suggest ALL the claim limitations (MPEP § 2143): The prior art references, in combination teach ALL the claim limitations as stated in the see rejection above.

In regards to applicants argument regarding claim 17: Sainton expressly teaches the lead is bi-directional capable of transmitting and receiving signals which is the definition of half duplex (Column 13 lines 10-14).

In regards to applicants argument regarding claim 19: Voice is Audio which Sainton expressly calls an audio output (Column 13 line 2). Sainton also teaches "Controller 204 may selectively deactivate data pump 208 and activate its first and fifth I/O ports to transfer data in serial digital form over the RX and TX lines".

In regards to applicants argument regarding claim 22: Sainton expressly teaches two voice channel leads. One RX and one TX.

In regards to applicants argument regarding claim 23: Sainton teaches an RX lead for receiving which is unidirectional and a TX lead for transmitting which is unidirectional these leads are full duplex by definition.

In regards to applicants argument regarding claim 28: First, Sainton teaches "Controller 204 may selectively deactivate data pump 208 and activate its first and fifth I/O ports to transfer data in serial digital form over the RX and TX lines". Second, Sainton teaches voice over the voice channel leads (RX and TX) and when the controller decides data is transferred over the voice channel leads (RX and TX).

In regards to applicants argument that the examiner has pointed to nothing Kyu in that teaches or suggests "wherein said at least one voice channel lead facilitates a bidirectional half duplex mode": Sainton teaches a full duplex bidirectional voice channel (TX and RX together). This requires two separate voice channel leads one unidirectional in one direction (TX) and one

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unidirectional on the opposite direction (RX). Kyu et al expressly teaches that both bidirectional half duplex mode (Fig 2A) and bidirectional full duplex mode (Fig 2B), which requires one unidirectional lead on one direction and one unidirectional lead in the other direction, are well known. Kyu et al shows that full duplex requires one more lead and half duplex only allows one direction at a time. It would have been obvious to a person of ordinary skill in the art at the time of the invention to provide bidirectional half duplex mode because this would have required one less lead.

In regards to applicants argument that “Even if, arguendo, Dent et al teaches a cellular terminal that is powered by an external signal line while the cellular terminal is parked, as suggested by the Examiner, Dent does not provide any teaching that overcomes the previously described deficiencies of the Sainton and Morris references”: The fact that the battery of Dent’s cell phone is not removed when it is connected without a cable or tether (Figure 2) shows that it is not required to remove a battery pack to directly couple a computer to a cell phone as argued by applicant.

In regards to applicants argument that “one of ordinary skill in the art would not have been lead to including a power signal ‘since this would have allowed for recharging the cell phone’, as suggested by the examiner, since Morris specifically requires that the battery in portable phone 38 be removed while portable phone 38 is connected to computer 22 - thus there is no possibility of the battery being ‘recharged’”: Again the examiner must point out the rejection was Sainton in view of Morris not Morris exclusively. Sainton expressly teaches the portable phone having a battery.

In regards to applicants argument that

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"just because Kobayashi teaches a notebook computer in which the battery pack fits completely within a cavity for holding the battery pack, it would therefore be obvious to ALSO fit a separate portable telephone completely within the surface of Kobayashi's notebook computer. The Examiner's purported motivation for the combination 'i.e., that it would be 'aesthetically pleasing' is pure supposition not supported by fact. Being that the internal space within notebook computers is at a premium and no space is wasted, what circuitry or subsystems in Kobayashi does the Examiner propose to remove in order to make room for an entire portable telephone"

Apparently applicant did not understand the rejection. Kobayashi teaches an item that fits completely within a cavity of a portable computer forming a clean smooth surface. Morris only teaches the portable telephone fitting partially within a cavity of a portable computer. Thus when it is connected you have this phone portion sticking out. A clean smooth surface would be more ~~ascetically~~ ^{pleasing} _{esthetically} than a large phone outdent. It would have been obvious to a person of ordinary skill in the art at the time of the invention to fit the phone totally within a cavity because this would be more ascetically pleasing. Furthermore, KSR, 127 S. Ct. at 1742, 82 USPQ2d at 1397. "A person of ordinary skill is a person of ordinary creativity, not an automation" *Id.*

(11) Related Proceeding(s) Appendix

Copies of the court or Board decision(s) identified in the Related Appeals and Interferences section of this examiner's answer are provided herein.

For the above reasons, it is believed that the rejections should be sustained.


Respectfully submitted,

PRM




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